

## Chapter Six



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# TRANSPORTATION AND CIRCULATION

Streets and Highways  
Public Transit  
Bicycle Transportation Plan  
Pedestrians

Adopted:

Merced City Council April 5, 1993

Approved:

Merced City Planning Commission March 17, 1993



Prepared by  
Merced City Planning Department  
Merced, California  
March 1993

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# THE CIRCULATION ELEMENT

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## SECTION I

### INTRODUCTION

#### *System Summary*

Merced's existing and planned circulation system is based on the City's core grid of arterial streets extended to the north and south. Arterial streets are spaced approximately one mile apart in newly developing areas, and one-half to one mile in older established areas. Collectors and local streets provide access to adjacent uses. Bus transit service is available and a major north-south transitway is planned along "M" Street. The City also contains a number of existing and planned bikeways and pedestrian ways.

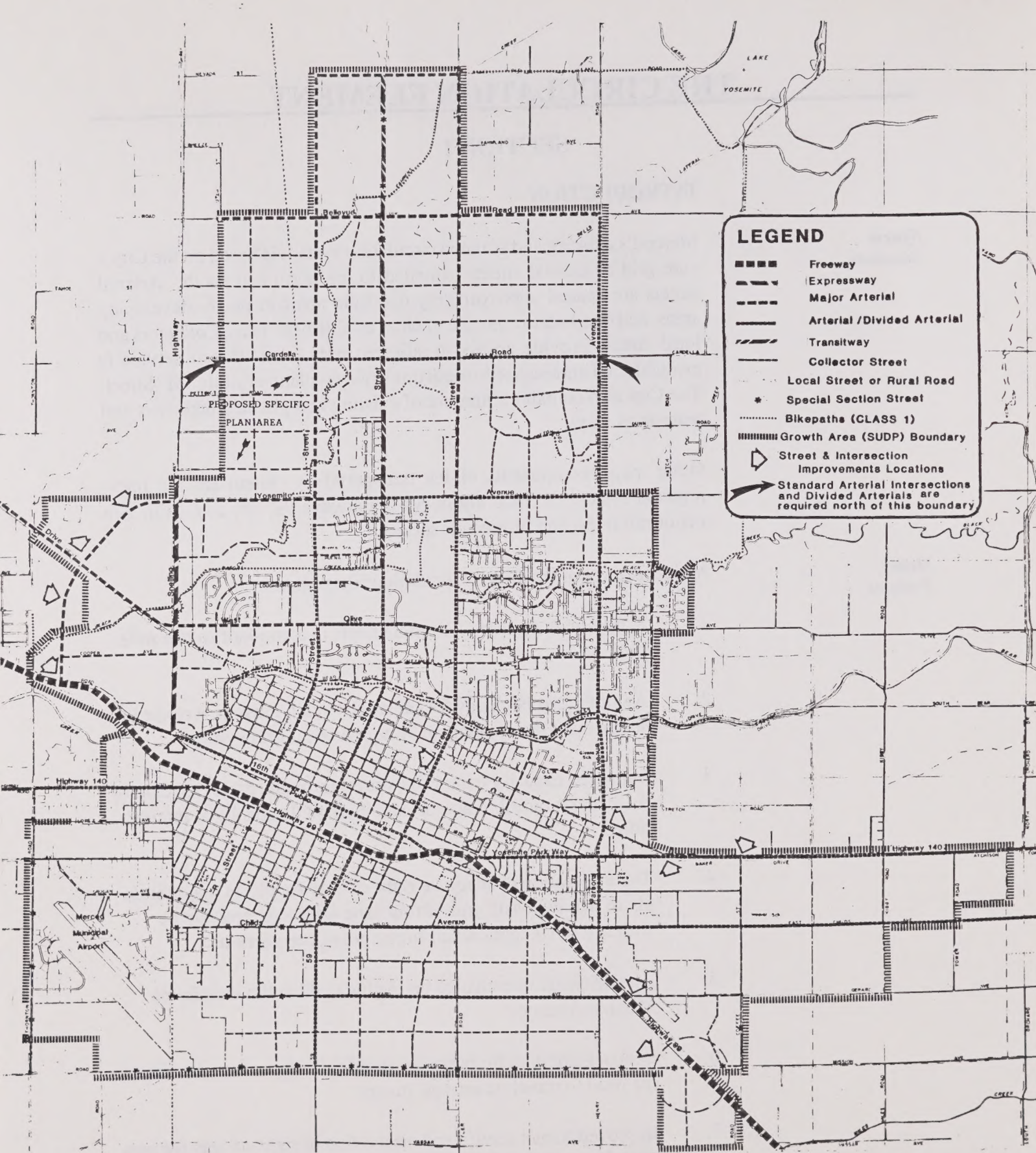
Other major components of the transportation system are the inter-regional system of State highways (Highways 99, 59, and 140), two major rail lines, and limited air service.

#### *Major Features*

Major features of the City's Circulation Element are:

1. A city-wide system of arterial streets in a one-half to one mile grid.
2. An upgraded Highway 59 and an extended Parsons Avenue to supplement the existing and future arterial grid system.
3. Improved capacity on arterial streets through careful spacing of roadways, control of access, and increased capacity at intersections.
4. The reservation of adequate right-of-way for future major arterials so that the basic grid of four-lane arterial streets can be widened to six lanes when future growth requires it.
5. An additional interchange on Highway 99 in the vicinity of Mission Avenue.
6. Design guidelines for future local and collector streets that reduce the need to travel on arterial streets.
7. Improved transit service and reservation of right-of-way for possible future light rail service.
8. A supplemental system of bikeways and pedestrian ways that help reduce the need for auto travel.





CITY OF MERCED

Circulation Plan Map

CITY OF MERCED  
PLANNING DEPARTMENT



1 1/4 1/2 0 1 Mile

March 1993



## SECTION II

### CIRCULATION ELEMENT GOALS AND POLICIES

#### Goals

The goals of the City's Circulation Element are:

1. An integrated transportation system planned and designed to provide a high level of service to existing and future development.
2. A safe and efficient transportation system.
3. A road system that minimizes adverse effects on residential areas and on the overall environment.
4. A transit system that provides a high level of accessibility to major destinations within the City.
5. A coordinated bikeway system.
6. An expanded system of pedestrian ways.

In order to achieve these goals, the City has adopted a set of coordinated policies and design standards. Circulation Element policies are listed below under each of the goals that they are intended to implement. Roadway and intersection design standards are summarized on pages 4 and 5, and described in more detail in the Appendix. A separate Circulation Plan map is available that shows the general location and functional classifications of major roadways. This information is summarized on the map on the following page.

### STREET AND HIGHWAY GOALS AND POLICIES

#### Goal

*An integrated transportation system planned and designed to provide a high level of service to existing and future development.*

#### Policies

**1.1:** Implement the planned circulation system where the design of each street is consistent with the character and use of adjacent land and the transportation function of street.

**1.2:** Designate and reserve adequate rights-of-way for new roads to meet anticipated traffic volumes, consistent with the street classification system standards.

**1.3:** Continue to coordinate the review and updating of the City's major street systems with County, Regional, and State planning and transportation agencies.

**1.4:** Improve traffic flow of all new arterial streets by the use of median strips and the elimination of unnecessary on-street parking.

**1.5:** Eliminate unnecessary cross-traffic and curb cuts to improve traffic flow along major streets and expressways.

**1.6:** Space intersections of expressways, major arterials, and collector streets to provide for maximum traffic flows and future synchronization of traffic signals.

**1.7:** In conjunction with the County, reduce street capacities beyond the City's eastern and western SUDP boundaries, consistent with expected traffic flows.

**1.8:** Continue to approve development proposals subject to meeting the requirements necessary to implement the Circulation Plan.

**1.9:** Make a strong commitment to increase the number of people per vehicle so that the existing street system is utilized to its fullest (e.g., car pools and HOV lanes).

**1.10:** Maximize the capacity of existing and future arterial intersections by requiring increased right-of-way and restricting commercial development on adjacent corners.

**1.11:** Minimize travel demand on arterial streets by encouraging the design of local and collector streets to provide multiple, direct routes to local neighborhood destinations.

<b>Goal</b>	<b><i>A safe and efficient transportation system.</i></b>
<b>Policies</b>	<p><b>2.1:</b> Coordinate all circulation systems to maximize safety and efficiency and minimize conflicts.</p> <p><b>2.2:</b> Reserve adequate road and intersection right-of-way to provide for the needs of traffic safety.</p> <p><b>2.3:</b> Promote increased traffic safety with special attention to hazards which could cause personal injury.</p>



2.4: Continue to mitigate safety hazards and program improvements to congested intersections before they become significant problems.

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Goal	<i>A transportation system that minimizes adverse effects on residential areas and on the overall environment.</i>
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Policies	<p>3.1: Ensure that the existing and proposed circulation systems accommodate their intended traffic functions with a minimum adverse impact on the environment.</p> <p>3.2: Promote and use methods for minimizing noise and air pollution associated with heavily-traveled traffic corridors.</p> <p>3.3: Locate and design future arterial streets to complement the residential neighborhoods, business centers, and other homogeneous areas being served.</p> <p>3.4: Design streets and street improvements to minimize impacts on residential neighborhoods and other adjacent land uses.</p> <p>3.5: Develop and require better landscaping, beautification, and maintenance for all streets and expressways.</p> <p>3.6: Ensure that design standards and proposed improvements to existing streets are consistent with the goals and policies of the Scenic Highways and Open Space Elements of the General Plan.</p>
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## SECTION III

### FUNCTIONAL ROAD CLASSIFICATION AND DESIGN STANDARDS

#### *Road Classifications*

City and regional streets and highways are classified by categories that reflect their importance and function. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest functional classification, with low speeds and volumes and direct access to adjacent property. The table and cross-sections on the following pages summarize the characteristics of each roadway category. More detailed design standards are described in the Appendix. These are illustrative characteristics only. Official design requirements are found in the *City of Merced's Standard Designs of Common Engineering Structures*.

Roadway characteristics and standards described in the Circulation Element apply to most common situations and generally should be considered as minimums. However, detailed traffic and design studies for specific development projects or roadway improvements may indicate that higher levels of improvements are required or that lesser standards may be permitted.



## CITY OF MERCED

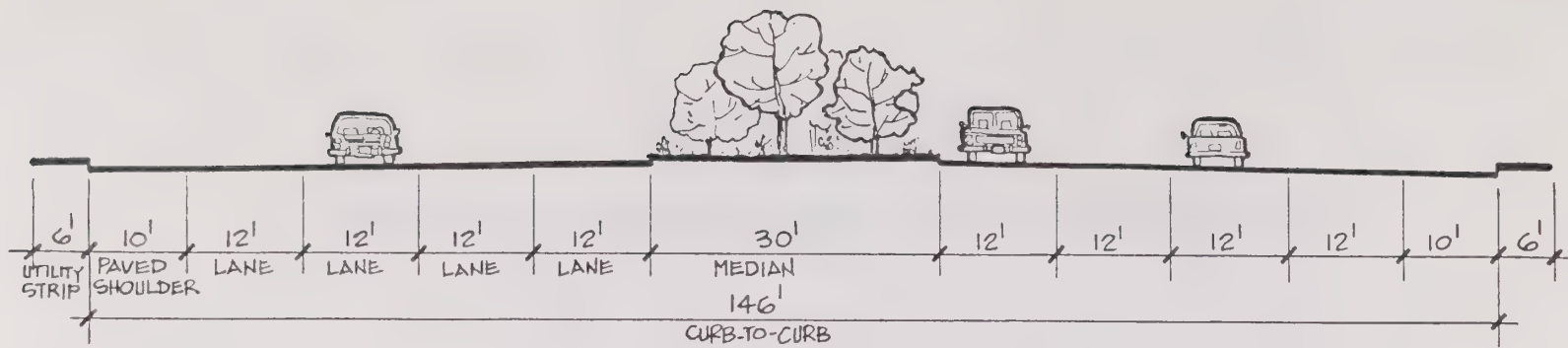
### SUMMARY OF STREET AND HIGHWAY STANDARDS

TYPE	R.O.W.	No. OF LANES	ACCESS RESTRICTION	INTERSECTION SPACING	PARKING
EXPRESS-WAY	134-158 ft.	4-8	Full	1 Mile	No
MAJOR ARTERIAL	128 ft.	4-6	Partial*	1/4-1/2 Mile	No
DIVIDED ARTERIAL	118 ft.	4-6	Partial*	1/4-1/2 Mile	No
ARTERIAL	94 ft.	2-4	Partial	1/8-1/4 Mile	Permitted In Selected Areas
COLLECTOR	74 ft.	2	Partial	As Needed	Permitted In Selected Areas
LOCAL	49-64 ft.	2	No	As Needed	Permitted
TRANSITWAY	Varies	2-6	Partial	1/4-1/2 Mile	Generally Not Permitted

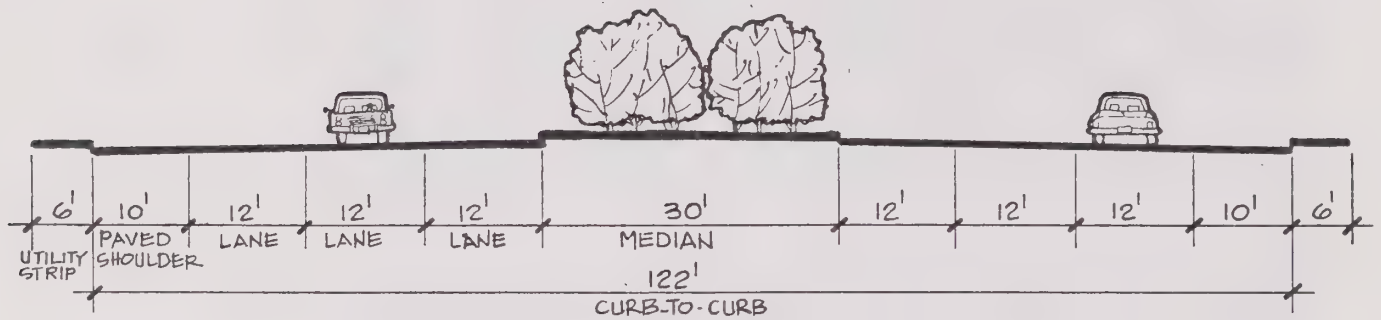
\*Generally no direct access to adjacent property. Right turn in-right turn out combined access may be permitted.

#### Note:

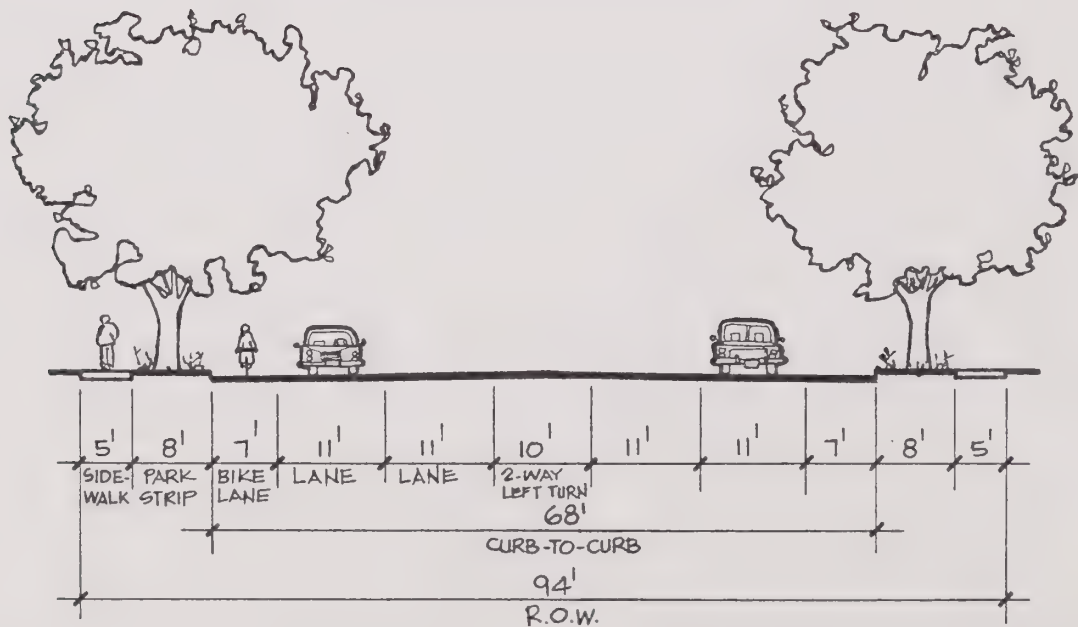
These are general standards appropriate for most situations. Higher standards may be required or lesser standards may be permitted based on detailed design studies. Currently adopted standards are contained in the City of Merced Standard Designs of Common Engineering Structures.



## 8-LANE EXPRESSWAY



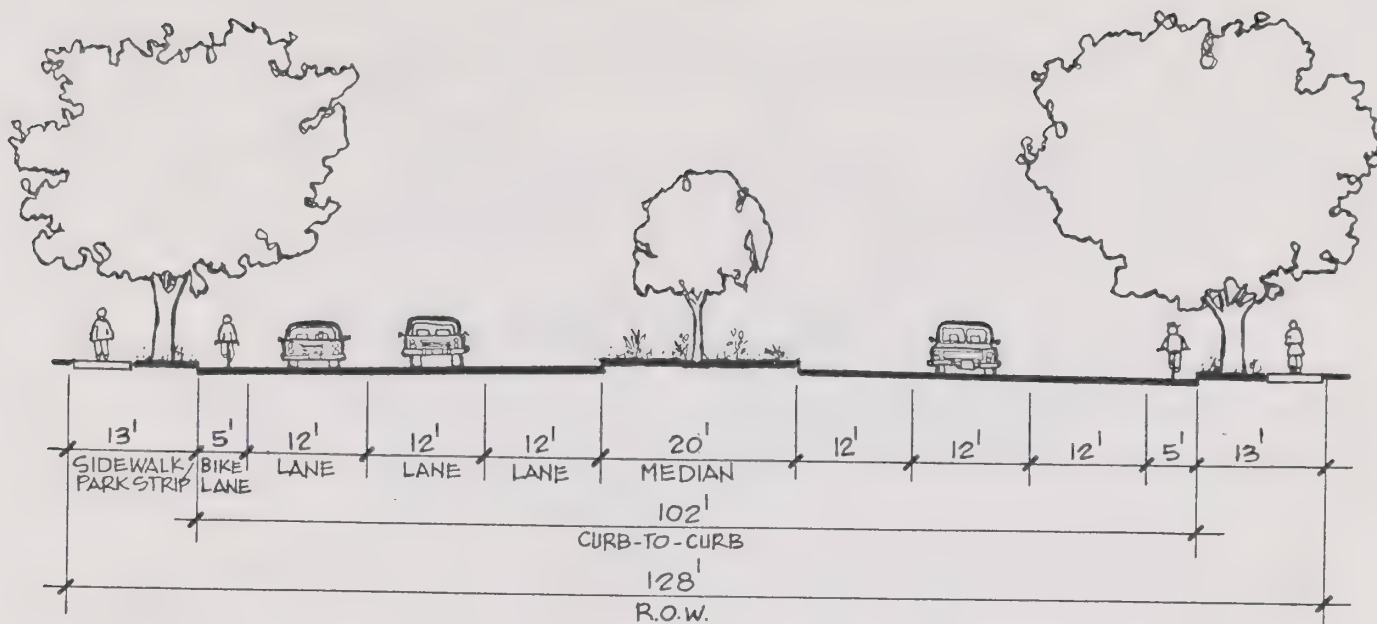
## 6-LANE EXPRESSWAY



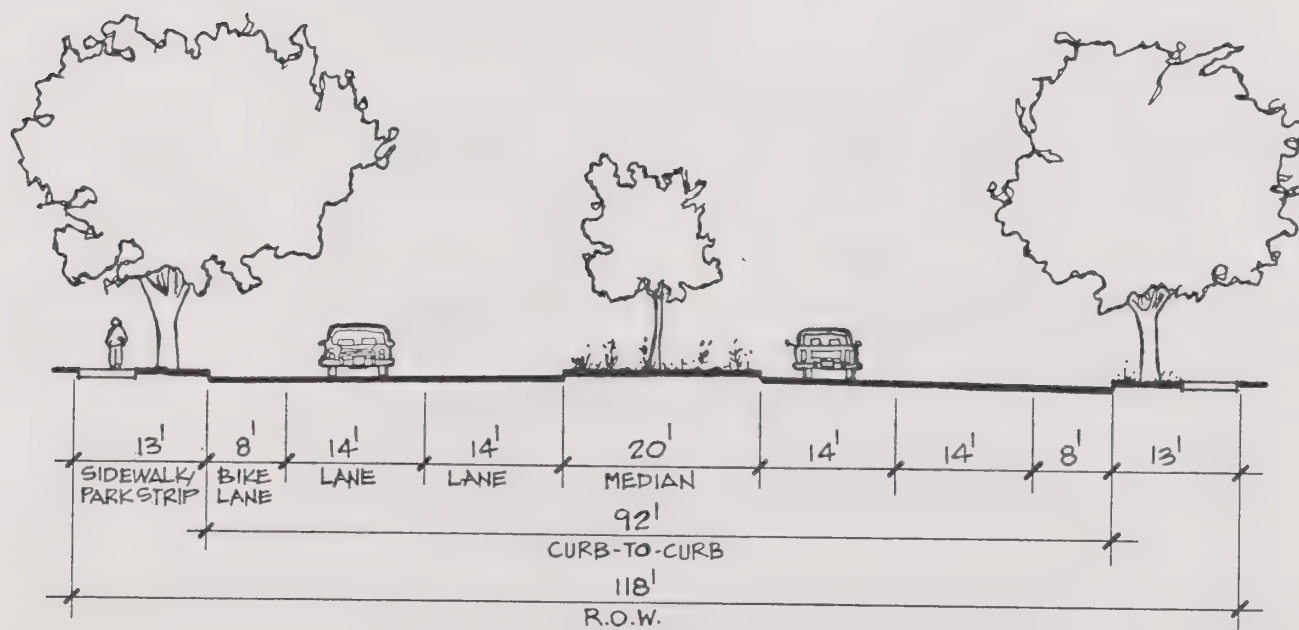
## ARTERIAL

CITY OF MERCED	SCALE : 1"=40'
TYPICAL STREET SECTIONS	CITY OF MERCED PLANNING DEPARTMENT March 1993



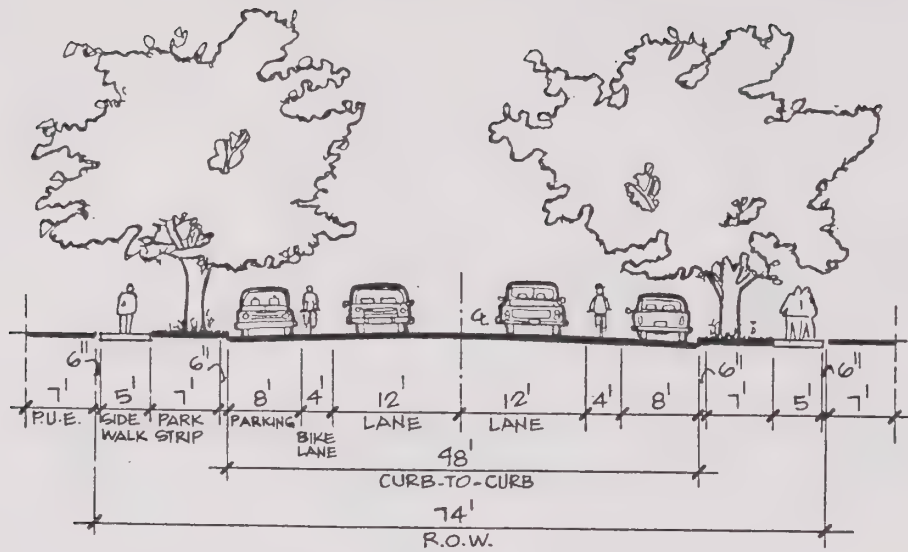


## MAJOR ARTERIAL

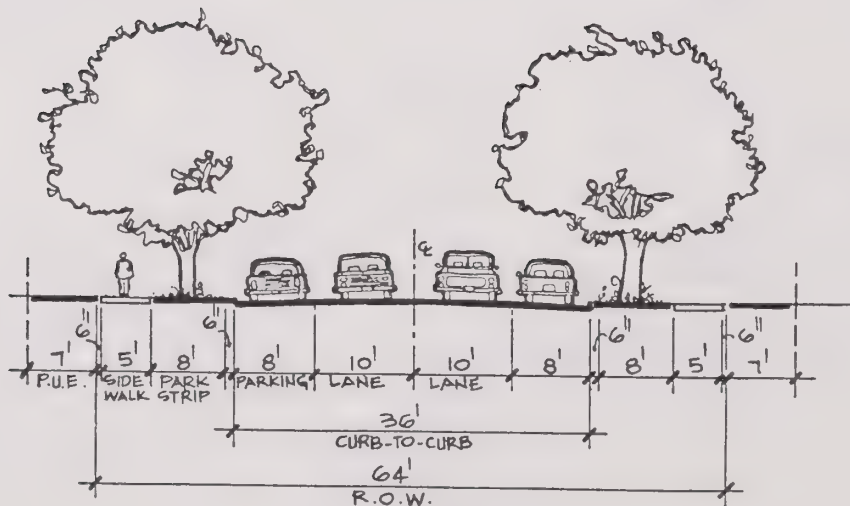


## DIVIDED ARTERIAL

CITY OF MERCED	SCALE : 1"= 40'
TYPICAL STREET SECTIONS	
CITY OF MERCED PLANNING DEPARTMENT March 1993	



## COLLECTOR



## LOCAL

CITY OF MERCED	SCALE : 1"=40'
TYPICAL STREET SECTIONS	
	CITY OF MERCED PLANNING DEPARTMENT
	March 1993



## SECTION IV

### INTERSECTION SPACING AND DESIGN STANDARDS

In order to provide for maximum traffic volumes on arterial streets, access must be controlled, intersections must be carefully spaced, and adequate capacity must be built into each intersection.

The design and spacing standards listed below apply to those areas within the City's Specific Urban Development Plan (SUDP) agreement area. They are generalized standards and apply to the most common conditions. Detailed traffic studies for specific development projects may indicate that higher level of improvements may be required, or that lesser standards may be permitted.

#### *Intersection Spacing Standards for Arterial Streets*

- Four-way intersections of future major and divided arterials with expressways and other arterials should be no closer than (approximate) one-mile intervals.

- Four-way intersections of future arterials with collector streets should be no closer than  $\pm 1/4$ -mile on east/west arterials, and  $\pm 1/2$ -mile on north/south arterials.

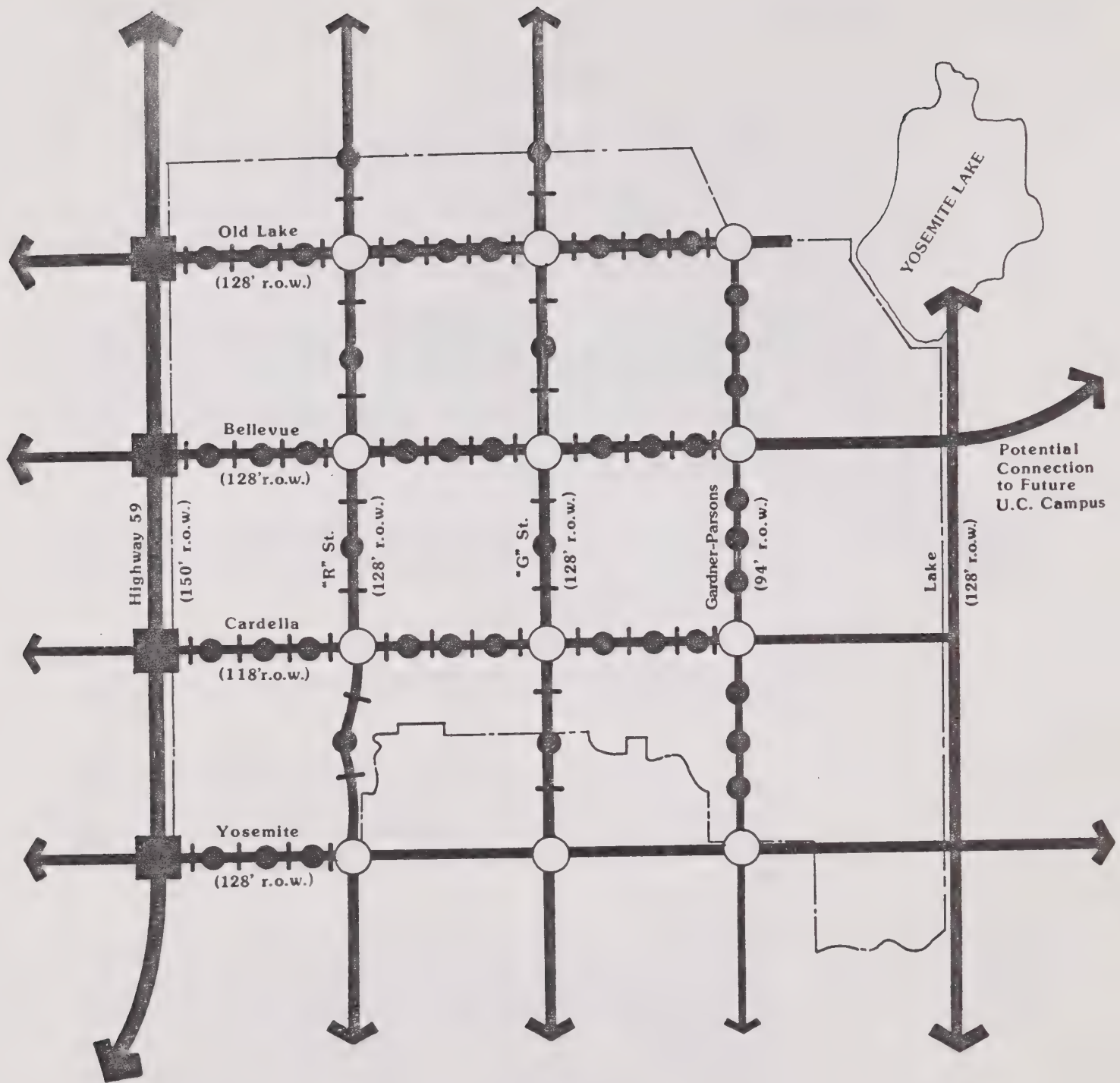
- Free right-turn intersections (right-turn-in/right-turn-out) may be permitted between collector intersections at  $\pm 1/8$ -mile intervals along east/west arterials, and at  $\pm 1/4$ -mile intervals along north/south arterials. These standards are illustrated graphically for North Merced on the following page.





#### *Intersection Design Standards*


Intersections are critical components of a circulation system. They frequently overload before the rest of the system and adversely affect adjacent arterial streets. In order to serve the high traffic volumes projected for future arterial streets, adequate capacity must be built into the intersection, or enough right-of-way must be preserved for future expansion. Curb cuts adjacent to and within the intersection tapers must be restricted or prohibited.

Summarized below are general minimum rights-of-way and design standards for standard intersections. More detailed descriptions of requirements are established in the *City of Merced Standard Designs of Common Engineering Structures*.

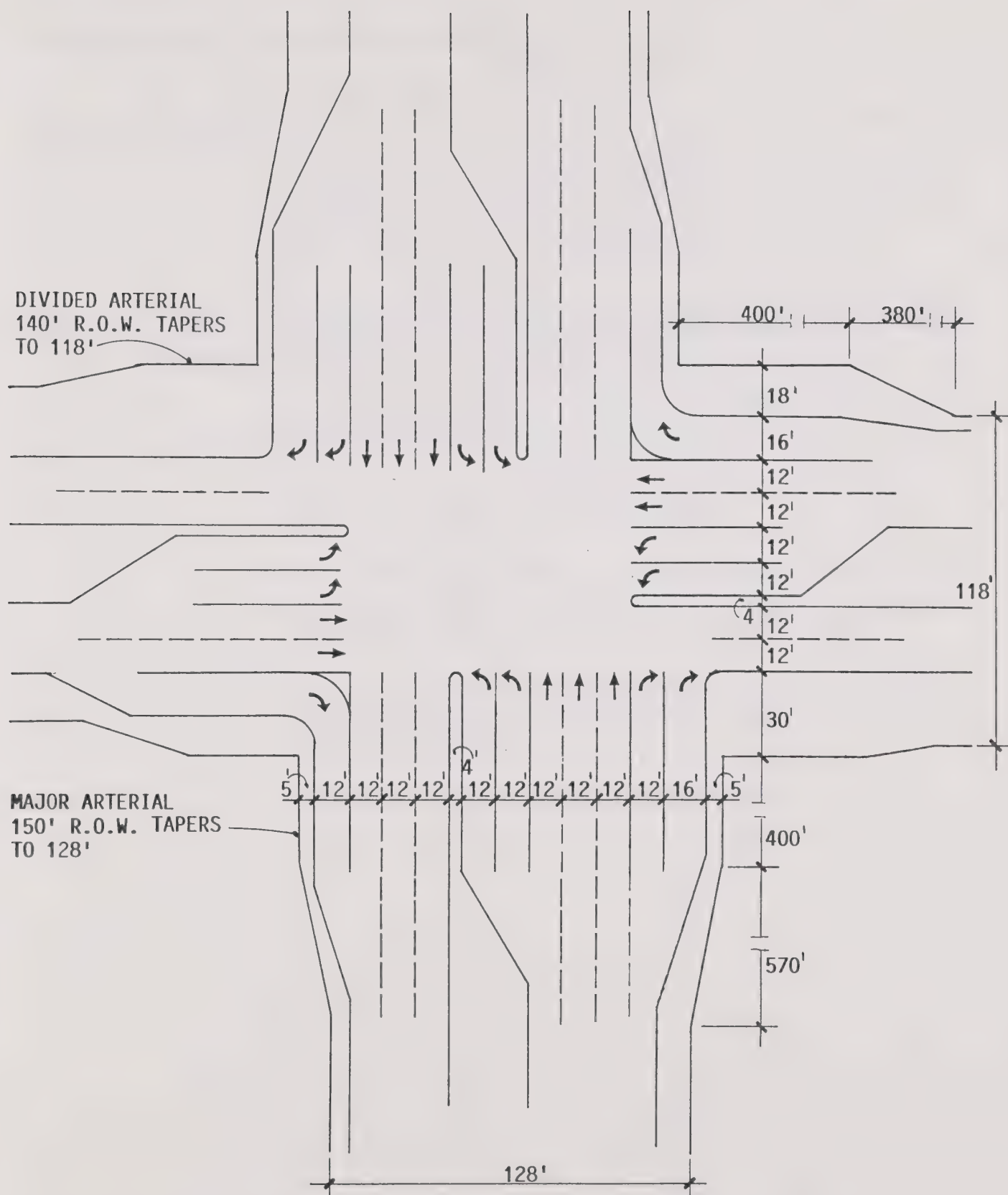
Like intersection spacing standards, these are general standards for the most common situations. Detailed intersection design studies may dem-



-  Expressway Intersection
-  Arterial Intersection
-  Left Turn Collector Intersection
-  Right Turn In/Out Only

<p><b>ARTERIAL NETWORK-NORTH MERCED AREA</b></p> <p><b>SPACING AND INTERSECTION LOCATIONS</b></p>	<p>CITY OF MERCED PLANNING DEPARTMENT</p> <p>NOT TO SCALE</p> <p>October 1992</p> 
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**TYPICAL AT-GRADE INTERSECTION DESIGN OF 6-LANE  
MAJOR ARTERIAL WITH DIVIDED ARTERIAL**

Source: Fehr & Peers, Working Paper on Circulation Options  
6/12/91

**NOT TO SCALE**

City of Merced  
Planning Dept.

onstrate that a higher level of improvements may be required, or a lesser design may be permitted.

*Major Arterial*

Right-of-way width shall be 150 feet starting at the intersection and going back 400 feet, then the right-of-way tapers to 128 feet at a point 970 feet from intersection.

This configuration will permit three through-lanes in each direction, with double left- and right-turn lanes.

*Divided Arterial*

Right-of-way width shall be 140 feet starting at the intersection and going back 400 feet, the right-of-way then tapers to 118 feet at a point 780 feet from intersection.

This configuration permits two through-lanes in each direction, with double left-turn lanes and a single right-turn lane.



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## SECTION V

### TRANSIT GOALS AND POLICIES

In order to develop and maintain a public transit system which is responsive to the needs of the community and to actively promote these systems to lessen the community's dependence on the automobile, the City establishes the following public transit goal and policies:

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Goal	<i>A transit system that provides a high level of accessibility to major destinations within the City.</i>
Policies	<p><b>1.1:</b> Provide for a major transitway along "M" Street extending both north and south of the downtown transit center.</p> <p><b>1.2:</b> Promote land development patterns and site design criteria that supports and enhances the use of public transit.</p> <p><b>1.3:</b> Continue to seek Federal, State, and other funding sources which provide major funding for transit equipment, maintenance, and operation. Support legislation which will provide additional funding.</p> <p><b>1.4:</b> Continue to review routes, scheduling, and vehicle operations of Merced Transit System with the aim of increasing transit patronage and improving the level of service.</p> <p><b>1.5:</b> Provide turnouts for transit stops on major streets.</p>

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## SECTION VI

### AIRPORT AND RAILROAD POLICIES

#### *Airport*

- |                 |  |
|-----------------|--|
| <b>Policy</b>   | <b>1.1:</b> Promote and encourage the orderly and timely development of commercial and general aviation facilities.  |
| <b>Action</b>   | <b>1.1.1:</b> Implement the Merced Municipal Airport Master Plan.  |
| <b>Policies</b> | <b>1.2:</b> Provide adequate ground transportation systems that complement air transportation facilities.  |
|                 | <b>1.3:</b> Continue to protect approach areas and control zones for both existing and future runway systems through land use restrictions and property acquisition where necessary. |

#### *Railroad*

- |                 |  |
|-----------------|--|
| <b>Policies</b> | <b>1.1:</b> Encourage and promote railroad passenger service for Merced.   |
|                 | <b>1.2:</b> Continue to explore the possibility of combining the AT&SF and Southern Pacific Railroads onto one route through the City using the existing Southern Pacific Railroad route parallel to Highway 99. |
|                 | <b>1.3:</b> Encourage the retention and addition of railroad tracks necessary to promote and retain industrial development.  |
|                 | <b>1.4:</b> Plan for the improvement and eventual elimination of at-grade railroad crossings over major arterial streets.  |

## SECTION VII

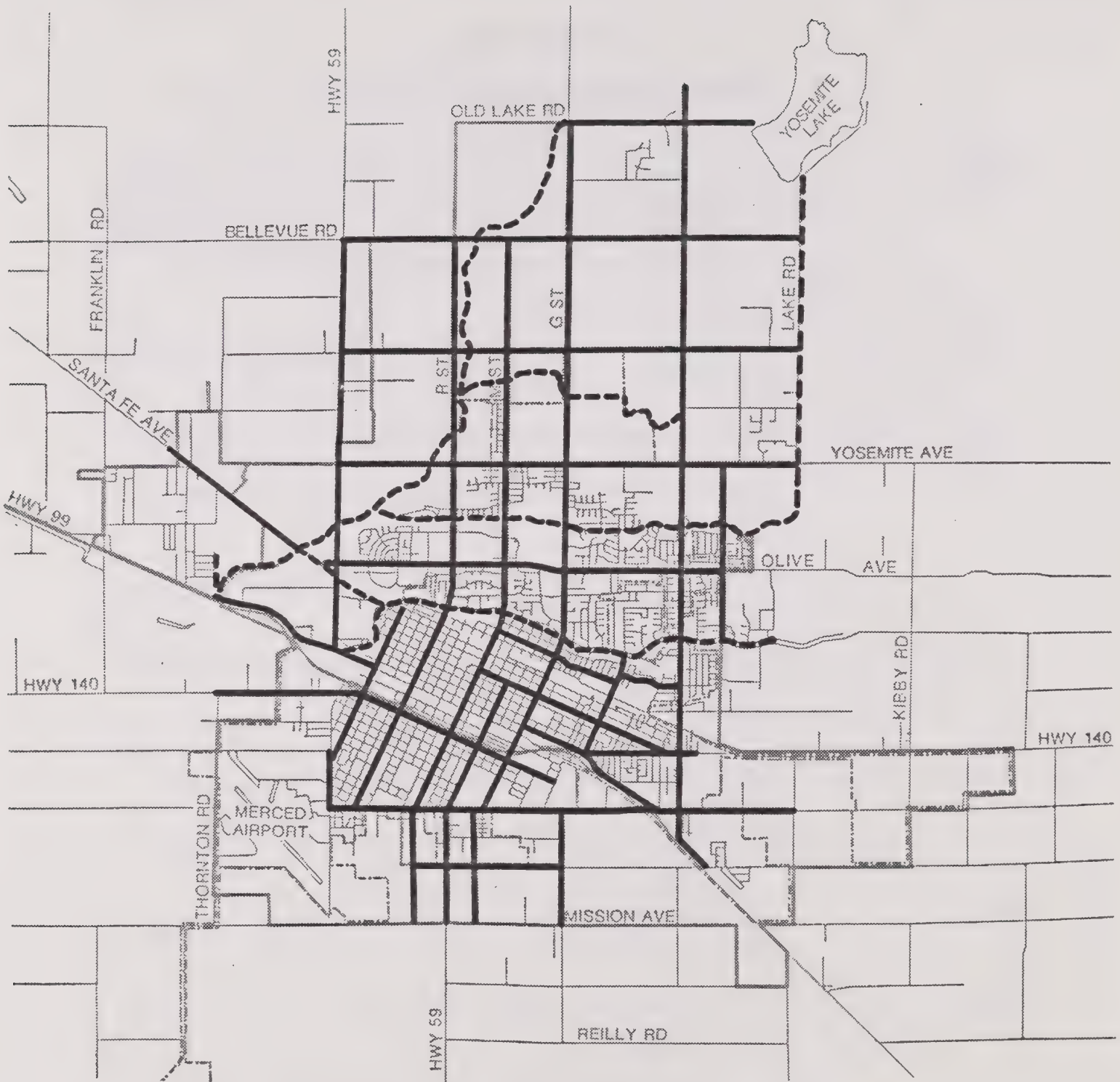
## BICYCLE AND PEDESTRIAN GOALS AND POLICIES

*Bicycle  
Transportation  
Policies*

In order to establish and implement a comprehensive bikeway plan for the City which serves both the transportation and recreation needs of City residents and which provides, where possible, separate and safe access to major destinations, the City establishes the following goal and policies as part of the overall Circulation Element of the General Plan:

Goal	<i>A coordinated system of bikeways connecting residential areas and destinations.</i>
Policy	<b>1.1:</b> Promote the use of bicycles as an alternative transportation system.
Actions	<p><b>1.1.1:</b> Formulate incentives for City employees who commute on bicycles.</p> <p><b>1.1.2:</b> Encourage other governmental agencies to promote bicycle use using incentive programs or other means.</p> <p><b>1.1.3:</b> Encourage private businesses to promote bicycle use for employees and customers.</p>
Policies	<p><b>1.2:</b> Provide adequate support facilities (e.g., bicycle parking, secure locking devices, etc.) through ordinance requirements.</p> <p><b>1.3:</b> Coordinate implementation of the Bicycle Transportation Plan with the County of Merced.</p>
Action	<b>1.3.1:</b> Pursue all available revenue sources for implementing the Bicycle Transportation Plan.
Policies	<p><b>1.4:</b> Use the following design criteria in the construction of all bike facilities in Merced:</p> <ul style="list-style-type: none"> <li>a. Bike trails, bike lanes, and bike routes (Class I, II, and III bikeways) should conform to the State of California "Planning and Design Criteria for Bikeways in California."</li> <li>b. Bike trails (Class I bikeways) should have grade separation with all major streets where possible.</li> </ul>





----- Class 1 (Off-Street)

———— Class 2 (On-Street)

<p><b>CITY OF MERCED</b></p>	<p>CITY OF MERCED PLANNING DEPARTMENT</p>
<p><b>Bicycle Transportation Plan</b></p>	<p>0 4000 8000 12000 FT.</p> <p>March 1993</p>

*Pedestrian Policies*

To recognize that pedestrianways are an integral part of the City's transportation system and should be provided, where appropriate in existing and future land development, the City establishes the following goal and policies:

<b>Goal</b>	<i>An expanded system of pedestrianways.</i>
<b>Policy</b>	<b>1.1:</b> Promote and utilize design and location criteria for pedestrianways which enhance their use throughout the City.
<b>Actions</b>	<p><b>1.1.1:</b> Continue to require sidewalks and paths, where appropriate, in subdivisions, planned developments and specific plans.</p> <p><b>1.1.2:</b> Locate streetlights, street signs, fire hydrants, and other obstacles so they do not obstruct sidewalks and other pedestrianways.</p> <p><b>1.1.3:</b> Require corner curb cuts to accommodate wheelchairs, baby strollers and carts.</p>
<b>Policies</b>	<p><b>1.2:</b> Support local and State legislation which provides for an increased level of safety and convenience for pedestrianway users.</p> <p><b>1.3:</b> Continue to encourage a quality pedestrian environment in the central business area and other major commercial areas that attract a great deal of pedestrian traffic.</p>
<b>Actions</b>	<p><b>1.3.1:</b> Continue to encourage the provision of plazas, malls, arcades and walk-throughs.</p> <p><b>1.3.2:</b> Encourage planting of shade trees and the establishment of rest areas with seating facilities along major pedestrianways.</p>





# APPENDIX

CIRCULATION ELEMENT



## SECTION I

### FUNCTIONAL ROAD CLASSIFICATIONS AND DESIGN STANDARDS

#### *Functional Classification*

Functional road classification categorizes each existing street or proposed street according to its primary function. This creates a hierarchical system as the basis for establishing standards, designing streets, selecting necessary traffic control measures, establishing a priority for construction, and measuring the quality of movement. In many cases, this system will also define appropriate land uses, the intensity of development, and the location of public facilities. The City's classification system is based on functional categories used by County, Regional, State, and Federal agencies.

The functional classification of streets and highways rests on the following concepts:

1. Streets and highways are classified into separate and distinct systems in accordance with their intended primary circulation purpose. Each system serves the movement of traffic and the access to property to a different degree.
2. Street classification governs design standards and construction and improvement priorities.
3. The City's circulation system must be coordinated with the networks of the State and County.
4. All major streets and highways have continuity, logical termini, and adequate capacity to allow and provide a high quality of flow.

The functional classification system used in the Circulation Element and the Circulation Plan map divides all streets and highways into the following categories:

#### *Freeways*

Freeways are major routes designed to carry large traffic volumes over long distances. Access is controlled, and grade separations and median strips are used to separate lanes of traffic moving in different directions. Through Merced, Route 99 is a four-lane freeway elevated from about the crossing of Bear Creek on the west, through the central part of the City to the intersection of Childs Avenue in the southeast area of the City. Its capacity for average daily traffic (ADT) is approximately 55,000 to 60,000 vehicles. Route 99's role is interregional in character, carrying



both the traveling public and serving as a vital commercial link carrying goods and produce both to and from the community.

#### *Expressways*

Expressways are roads designed to carry traffic volumes intermediate between freeways and major arterials. Opposing traffic is separated by wide medians, but speeds are usually somewhat lower than freeways. Access is fully controlled with intersections generally at one mile or greater intervals. Intersections may be separated or at-grade. In some cases, partially separated "urban interchanges" can be used.

Right-of-way requirements vary, depending on the number of lanes provided. CalTrans standards call for a minimum of 134 feet for a six-lane roadway and 158 feet for an eight-lane facility.

Currently, there are no roadways within the city built to expressway standards. A future link between Yosemite Avenue and Highway 99 is proposed as an expressway.

#### *Major Arterials*

Major arterials are roads designed to carry moderately heavy traffic volumes at moderate speeds. The extensions of "R" and "G" Streets north of Yosemite Avenue are classified as "major arterials." Access is controlled, crossings are at-grade. Major intersections are generally every mile, and intersection with collector streets are permitted every one-quarter to one-half mile. There are medians between traffic traveling in opposite directions. Major arterials form standard arterial intersections, generally at every mile, when they intersect an arterial or higher order street (beginning with Cardella Road and north of Cardella).

The basic right-of-way for **major arterials** is typically 128 feet. At 970 feet from standard arterial intersections, the basic right-of-way for the major arterial will typically begin expanding; the maximum curb-to-curb width of 150 feet will be reached for the final 400 feet approaching the major intersection, or as designed in those standards to be established in the *City of Merced Standard Designs of Common Engineering Structures*. Access to abutting properties is restricted to internal streets or frontage roads. Parking is prohibited. Capacity varies depending upon lane width, lateral clearance, and distance between intersections. Major arterials should be heavily landscaped to give them a parkway-type character and identify their function to the driver.

### *Arterial Streets*

Arterial streets are designed to carry moderate traffic volumes at lower speeds than major arterials. Some arterial streets have medians to control cross-traffic and are classified as divided arterials. Presently, parts of Olive Avenue, "M" Street, "G" Street, and "R" Street are designed and function as divided arterials. The main function of arterials is to accommodate trips within the City and other medium-distance movements. The arterials provide the basic transportation links between various land uses and major destinations in the City. Separate turning lanes are usually provided and signals control major intersections. Standard arterial intersections are presently required on, and north of, Cardella Road intersections for major streets such as expressways, major arterials, divided arterials, and other arterials.

The basic right-of-way for *divided arterials* is typically 118 feet, and each leg of the standard arterial intersection forms a curb-to-curb ROW of 138 feet for a length of 400 feet, and narrows to the basic ROW at 780 feet from the intersection, or is designed as found in those standards to be established in the City of Merced Standard Designs of Common Engineering Structures. Curb cuts for driveways are located away from intersections and limited to only essential access points. Restrictions may be placed on entering and exiting. Curbside parking is not allowed in most cases. Turnouts for transit stops should be considered. *Undivided arterials* should have a right-of-way of at least 94 feet wide. Landscaping and lighting should be designed to emphasize and identify the importance of the street.

### *Transitways*

A transitway is a special category of arterial street that is designed to accommodate a higher level of transit service than provided on standard arterial streets. They may be exclusive (for transit only) or may permit a mix of auto and transit vehicles. In newly developing areas, exclusive transit rights-of-way can be provided or, for mixed transitways, a minimum 118-foot ROW will accommodate two high-occupancy vehicle (HOV) lanes for express buses, two travel lanes for other vehicles, bicycle routes, and special landscaping. New transitways should be designed to facilitate future conversion to a trolley or light rail system when volumes warrant it.

In already-developed areas, transitways are usually mixed, with exclusive bus or HOV lanes designated for the curb lane. In most cases, bus turnouts should be provided wherever possible.

### *Collector Streets*

Collector streets are designed to channel traffic from local streets into the major street system and to handle short trips within neighborhoods. They distribute and collect traffic which is generated in the area circumscribed

by major streets. They provide for movement within industrial, commercial, and residential areas, or for connecting adjacent land uses. Speeds are generally low due to pedestrian activity and the frequent access to abutting land uses.

Collectors normally have just two lanes of traffic with right-of-ways up to 74 feet (except larger where a median strip is included). Parking may be prohibited in selected areas where the pavement width is needed for traffic capacity. Examples of existing collector streets include Loughborough Drive, East Alexander Avenue, or East 21st Street.

#### *Local Streets*

Local streets primarily provide access to destinations within residential neighborhoods or business districts. Local streets include local through-streets, local cul-de-sacs, and alleys. In residential areas, these are the streets upon which houses front. Therefore, it is important to eliminate through-traffic to a maximum degree by using cul-de-sacs, looped streets, and T-intersections. They should be designed to carry no more traffic than is required to serve the abutting land uses at low speed travel, and usually permit parking on at least one side.

#### *Rural Roads*

Rural roads may be arterials or major or minor collector streets, depending upon their traffic-carrying requirements, adjacent land use, or special circumstances. Separate turning lanes, passing lanes, curbs, gutters, and sidewalks are provided only where necessary or when the area is planned for future urbanization. Design details may vary, but this type of road should reflect consideration of an existing environment and the future development of the area. In unincorporated areas that are within or adjacent to a City's Sphere of Influence or SUDP, adequate right-of-way should be reserved, and direct access to a roadway should be restricted. At a minimum, adequate building setbacks should be required so that it is easier to widen roads when the area eventually develops to urban densities.

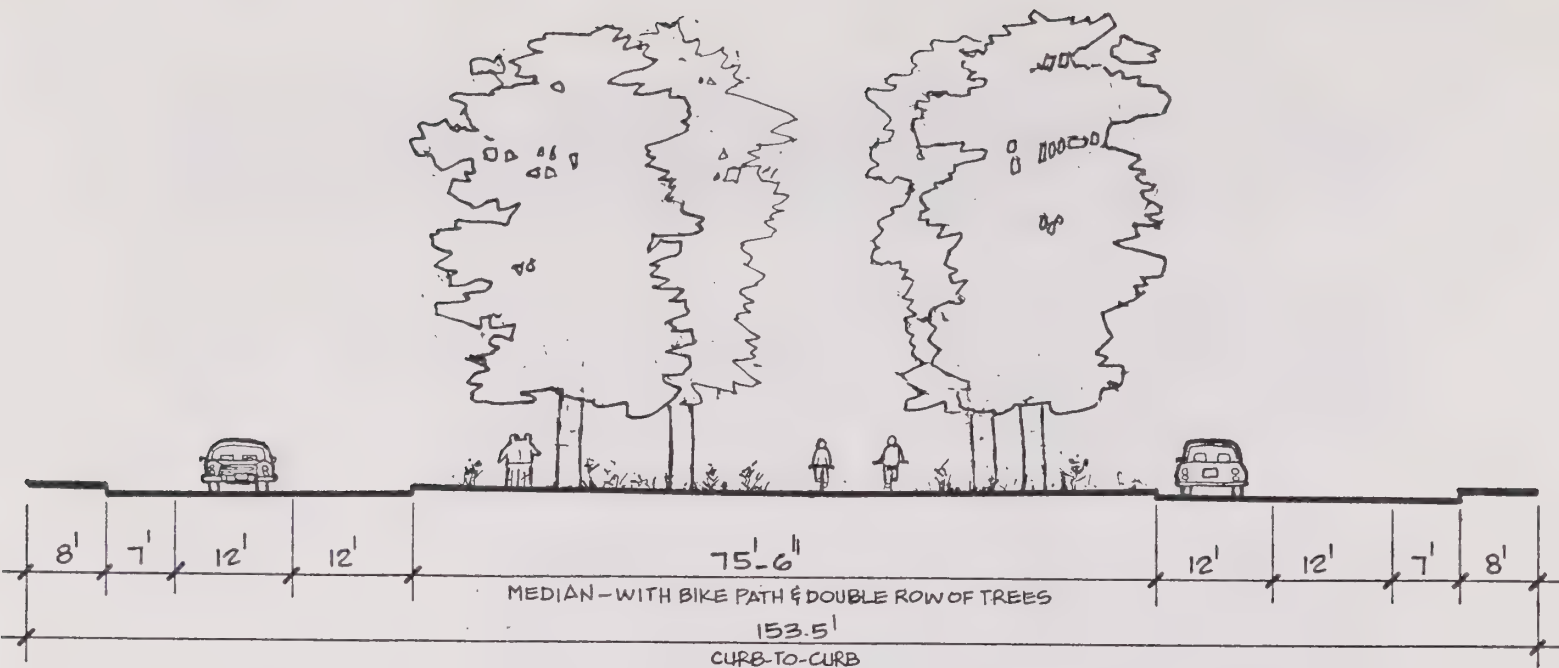
Rural roads are important in integrating the County road system with the City's urban expansion area. The key in determining the use of this road design is the expected time of development and the type of development proposed. A fundamental principle in the circulation system is to have major City streets drop down in and capacity to a rural road classification as they extend beyond the City's Sphere of Influence or SUDP to rural residential buffer zones and permanent agricultural areas.

#### *Special Arterial, Collector, or Local Streets*

These are special streets which do not use normal design sections. These streets are designated where conditions warrant special designs, such as absence of curb and gutter adjacent to permanent agricultural areas,

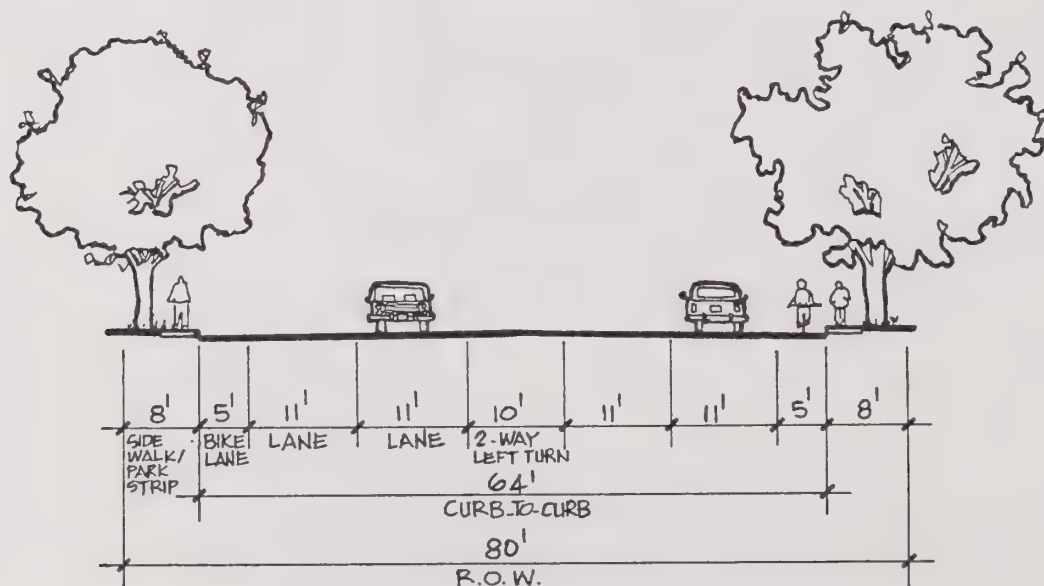


insufficient right-of-way, State highway needs, physical boundaries, or older existing neighborhoods. Variations in right-of-way width, curb-to-curb width, requirement of improvements, etc. may be permitted for these special streets.



## MAJOR DIVIDED ARTERIAL-SPECIAL SECTION

**Note:** Applies only to "M" street between Black Rascal Creek and the northern boundary of Merced College.



## ARTERIAL-SPECIAL SECTION

**Note:** Applies to HWY 140 from V street to 207' west of X street.

CITY OF MERCED	SCALE : 1"=40'
TYPICAL STREET SECTIONS	
CITY OF MERCED PLANNING DEPARTMENT March 1993	

## SECTION II

### OTHER TRANSPORTATION SYSTEM COMPONENTS

#### *Transit*

The City is presently served by a variety of transit services including the City's Merced Transit System, the County MARTS (Merced Area Regional Transit System), private taxis, and inter-regional services such as private bus firms, Amtrak, and limited air passenger carriers. This assortment of public transportation services will provide a good base for expansion as the city continues to grow. Public transit also will help to meet the transportation needs of the community's population without autos and those restrained by age or physical handicap.

In 1974, the Merced Transit System was created using four modified vans providing a demand responsive Dial-A-Ride service within the city limits of Merced. The primary goal of this program was to serve the senior citizens, low-income people and the handicapped. By 1980, the system enlarged to a fleet of eight buses, with a permanent dispatch and maintenance facility located at the City's Corporation Yard. Funding for Merced Transit System has come in the past from three major sources:

1. Urban Mass Transportation Authority (UMTA) -- a Federal source of revenue used for capital improvement and operating budget.
2. SB325 -- State of California Gas Tax Funds, available for use in the operating budget.
3. SB620 -- State Transportation Funding, a special revenue source for transit uses only available for special requirements in support of capital improvements.

During 1992, the Merced Transit System operates Monday through Friday from 7:00 a.m. to 6:00 p.m. over six fixed routes. The fare is \$0.75 with seniors and handicap individuals riding for \$0.50. Monthly passes also can be purchased. Merced Transit carried 200,800 passengers during 1992. Transit buses are Ford Econoline van conversions (12) seating up to 20 passengers, and six small vans for Dial-A-Ride service.

The six routes provided by the Merced Transit System serve downtown Merced and nearby neighborhoods. They also provide access to major trip generators such as the Merced Municipal Airport, Civic Center, Merced Hall, Mercy Hospital, and many local schools including Merced College. In addition to the six regularly scheduled routes, the Merced



Transit System also provides Dial-A-Ride for seniors and handicap individuals.

Ridership has continued to increase on the system with the use of both fixed route and demand/response operations. In order to provide the most efficient service in terms of both rider needs and cost-effective delivery, it is likely that this combination or hybrid of fixed route and demand/response service will be best suited for Merced in the near future.

There are two primary objectives in planning for public transit. One is to encourage and promote the development of all existing public transit systems now serving the community. The second objective is to better coordinate and centralize the existing services to make public transit easier and more acceptable to a larger segment of the population.

### *Bicycle Transportation*

In the future, bicycles may become an important mode of transportation in the community. Merced has both a favorable climate and terrain to encourage the use of bicycles for both recreational and transportation functions. As the use of bicycles increases, adequate facilities must be provided to furnish direct routes of access between destinations while minimizing conflicts with automobiles and the risk of serious accident.

Bicycle facilities are categorized by the degree which they separate bicycle movement from traffic flow of automobiles. There are two major types of bikeways: (1) off-street bikeways, and (2) on-street bikeways.

Based on the State Department of Transportation classification system, off-street bikeways should be Class I (Bike Paths or Bike Trails) whenever possible. Class I bike paths provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized. In Merced, Class I bike paths generally take advantage of creekside locations and other non-street facilities, such as canals or railroad corridors. Although the off-street bikeways provide extensive recreational opportunities, the primary focus is on safe and efficient transportation linking major land uses and connecting with on-street bikeways at strategic locations.

On-street bikeways are intended to be Class II (Bike Lanes) whenever possible. Class II bike lanes provide a restricted right-of-way on the street for the exclusive or semi-exclusive use of bicycles. Through travel by motor vehicles or pedestrians is prohibited, but with cross flows by pedestrians and motorists are permitted. The on-street bikeway system may use Class III (Bike Route) designations occasionally where Class II bike lanes are not feasible. Class III bike routes provide a right-of-way

generally designated by signs and shared with pedestrians or motorists. Class III bike routes are to be avoided if possible and used only to connect or continue Class I or II facilities for short distances. On-street bikeways should utilize those existing or proposed major streets that provide the quickest, shortest, and safest route to take for bicyclists as well as motorists.

#### *Pedestrians*

Pedestrianways should provide safe and convenient movement to major pedestrian destinations. The needs of school children and the special problems of the handicapped are of special importance.

Both sidewalks and separate paths can be provided for pedestrian movement. As with bicycles, separate public easements or rights-of-way provide unique opportunities for pedestrian circulation.

Indirect street systems, found in modern subdivisions, are often inconvenient to the pedestrian. The planning of residential areas needs to recognize pedestrian movements, whether to schools, parks, shopping, or public transit routes. A system of pedestrianways also can serve a secondary use as bicycle access to local streets and other portions of the bicycle path systems.





RESOLUTION NO. 93- 36

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
MERCED AMENDING THE CIRCULATION ELEMENT OF THE  
GENERAL PLAN

THE CITY COUNCIL OF THE CITY OF MERCED DOES HEREBY RESOLVE AS  
FOLLOWS:

SECTION 1. Having been considered by the City Council  
following a public hearing on April 5, 1993, the Circulation  
Element of the General Plan of the City of Merced is hereby amended  
to read as set forth in Exhibit A attached hereto and incorporated  
herein by reference.

SECTION 2. The City Clerk is hereby directed to endorse upon  
the General Plan of the City of Merced the above revision and the  
date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Merced  
at a regular meeting held on the 5th day of April, 1993, by the  
following called vote:

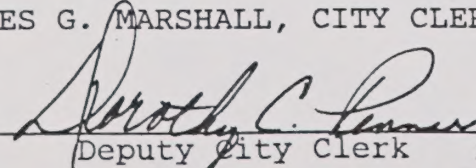
AYES:	Council Members:	HASSETT, KNUDSEN, DIAS, BERGMAN, BERNASCONI, LINDSEY
NOES:	Council Members:	NONE
ABSTAIN:	Council Members:	NONE
ABSENT:	Council Members:	(ONE VACANCY)

APPROVED:

ATTEST:

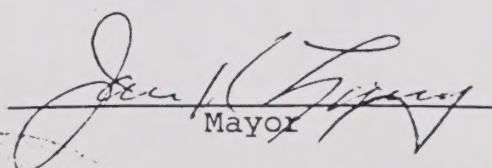
JAMES G. MARSHALL, CITY CLERK

BY:

  
Deputy City Clerk

(SEAL)

RESGNPLNNE

  
Mayor





U.C. BERKELEY LIBRARIES



C124907838



